

## ABSTRACT:

Described is a transmission system for transmitting a multicarrier signal from a transmitter (10) to a receiver (20). The multicarrier signal comprises a plurality of subcarriers. The receiver (20) comprises a channel estimator (28) for estimating amplitudes of the subcarriers and for estimating time derivatives of the amplitudes. The receiver (20) further comprises an equalizer (24) for canceling intercarrier interference included in the received multicarrier signal in dependence on the estimated amplitudes and derivatives (29). The receiver (20) comprises a multiplication by a  $N \times N$  leakage matrix  $\Xi$ , and wherein the multiplication is implemented as a sequence of an  $N$ -point IFFT (82),  $N$  pointwise multiplications (84) and an  $N$ -point FFT (86).

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Fig. 6